

Notice of Allowability

Application No.

10/780,574

Examiner

Patricia C. Mallari

Applicant(s)

NARIMATSU, KIYOYUKI

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 2/19/04.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 19 February 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 2/19/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

US Patent No. 6,524,257 to Ogura and US Patent No. 6,843,772 to Nunome et al. represent the prior art most relevant to the claims of the instant application.

US Patent No. 6,524,257 to Ogura discloses an arteriostenosis diagnosing apparatus. The apparatus comprises an inferior limb blood pressure measuring device 18L, 18R, 28c, 28d, 82, which measures an inferior limb blood pressure at a first measuring point on an inferior limb of a living subject (figs. 2 & 5; col. 7, lines 14-24; col. 13, line 61-col. 14, line 18 of Ogura). A superior limb blood pressure measuring device 20, 28, 72 measures a superior limb blood pressure at a second measuring point on a superior limb of the subject (figs. 2 & 5; col. 7, lines 14-24; col. 13, line 61-col. 14, line 18 of Ogura). An inferior and superior limb blood pressure index determining means 84 determines an inferior and superior limb blood pressure index of the subject, based on the inferior limb blood pressure measured by the inferior limb blood pressure measuring device 18L, 18R, 28c, 28d, 82 and the superior limb blood pressure measuring device 20, 28, 72 (fig. 5; col. 14, lines 21-36 of Ogura). A first pulse wave velocity related information obtaining means 68 obtains first pulse wave velocity related information that is related to a first velocity at which a first pulse wave propagates through a first interval whose one end is defined by the first measuring point and which includes an upstream portion of the inferior limb that is located upstream of the first measuring point as seen in a direction of flow of arterial blood in the inferior limb (fig. 2; col. 9, line 64-col. 10, line 5 of Ogura). A second pulse wave velocity related information obtaining means 66

obtains a second pulse wave velocity related information that is related to a second velocity at which a second pulse wave propagates through a second interval which does not include any portions of the inferior limb (fig. 2; col. 9, lines 28-63 of Ogura). The judging means 38 fails to determine that there is a possibility that the inferior limb has arteriostenosis when the first pulse wave velocity related information falls in a prescribed normal information range, the second pulse wave related information falls in a prescribed abnormal information range and the inferior and superior limb blood pressure index does not fall in a prescribed abnormal index range. Instead, the arteriostenosis judging means 38 of Ogura judges whether the first pulse wave velocity related information falls within an abnormal range (col. 17, lines 30-36 of Ogura) and initiates a process to determine the inferior and superior blood pressure index if the first pulse wave velocity related information is determined to fall within the abnormal range.

Similarly, US Patent NO. 6,843,772 to Nunome et al. discloses a stenosis diagnosing apparatus comprising an inferior limb blood pressure measuring device 20, 24, 72, a superior limb blood pressure measuring device 40, 46, 74, an inferior and superior limb blood pressure index determining means 76 for determining an inferior and superior limb blood pressure index, a first pulse wave velocity related information obtaining means 78 for obtaining a first pulse wave velocity related information, and a second pulse wave velocity related information obtaining means 80 for obtaining a second pulse wave velocity related information (fig. 2; col. 8, line 66-col. 9, line 15; col. 9, lines 38-65; col. 10, lines 30-35; col. 11, lines 24-57; col. 12, lines 10-50 of Nunome). However, Nunome also lacks an arteriostenosis judging means for judging that there is

a possibility that the inferior limb has arteriostenosis when the inferior and superior limb blood pressure index does not fall in a prescribed abnormal index range, when the first pulse wave velocity related information falls in a prescribed normal information range, and when the second pulse wave velocity related information falls in a prescribed abnormal information range, as claimed by the instant application. Instead, the judging means of Nunome verifies that the inferior and superior limb blood pressure index is valid when a ratio of the inferior pulse wave velocity related information and the superior pulse wave velocity information falls within a pre-set normal range (col. 16, lines 19-34 of Nunome). Additionally, the judging means of Nunome determines that the index is unreliable if the index does not fall in a prescribed abnormal index range (col. 16, lines 31-33 of Nunome), rather than judging that an inferior limb may have arteriostenosis, as claimed by the instant invention.

Therefore, the prior art of record fails to teach or fairly suggest an arteriostenosis diagnosing apparatus comprising an arteriostenosis judging means for judging, when the inferior and superior limb blood pressure index does not fall in a prescribed abnormal index range, when the first pulse wave velocity related information falls in a prescribed normal information range, and when the second pulse wave velocity related information falls in a prescribed abnormal information range, that there is a possibility that the inferior limb has arteriostenosis, in combination with all of the other limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,755,792 to Masuda et al.

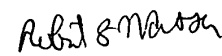
US Patent No. 6,669,646 to Narimatsu et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia C. Mallari whose telephone number is (571) 272-4729. The examiner can normally be reached Monday-Friday 10:00 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patricia Mallari
Patent Examiner
Art Unit 3736


ROBERT L. NASSER
PRIMARY EXAMINER